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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/666,294

09/18/2003

Ashish Dubey

2033.66886

9047

24978

7590

03/17/2008

GREER, BURNS & CRAIN
300 S WACKER DR
25TH FLOOR
CHICAGO, IL 60606

EXAMINER

LEE, EDMUND H

ART UNIT

PAPER NUMBER

1791

MAIL DATE

DELIVERY MODE

03/17/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/666,294

Applicant(s)

DUBEY ET AL.

Examiner

EDMUND H. LEE

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Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 and 26-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 26-32 is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pearson et al (USPN 3289371) in view of Yano et al (USPN 3972972) and Davis Sr (USPN 3615979). In regard to claim 1, Pearson et al teach all of the claimed limitations (col 4, ln 74-col 5, ln 50; and fig 10) except actively embedding by directly contacting and creating a kneading or massaging action in the slurry. It should be noted that Yano et al has been provided merely to illustrate the inherent cementitious (cement-like) properties of gypsum. Davis Sr teaches molding a composite sheet molding compound wherein fibers are actively embedded into a resinous slurry layer by directly contacting and creating a kneading or massaging action (col 4, lns 15-23; and figs 1-2). It should be noted that a squeeze roll is used in both Pearson et al and Davis Sr in order to embed the fibers into the resinous slurry layer. Pearson et al and Davis Sr are combinable because they are analogous with respect to molding composite sheet molding compounds, wherein fibers are embedded into a slurry layer. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the kneading/massaging disks of Davis Sr into the process of Pearson et al in

order to ensure proper distribution of the slurry around the fibers. In regard to claims 2,3,10,13, and 14, such are taught by Pearson et al (col 4, ln 74-col 5, ln 50; and fig 10). Pearson et al, however, do not teach producing a product having the product limitations of claims 4-7 and 15-16; using a nip roll feeder having a metering roll and a thickness control roll; embedding by the limitations of claims 9 and 11; and using the apparatus set up of claim 12 to form the last layer. In regard to producing a product having the product limitations of claims 4-7 and 15-16, such is a mere obvious matter of choice dependent on the desired final product and of little patentable consequence to the claimed process since it is not a manipulative feature or step of the claimed process. Further, the claimed limitations are well-known in cementitious products. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to produce products having the claimed product limitations in order to provide diverse products. In regard to using a nip roll feeder having a metering roll and a thickness control roll, such is well-known in the molding art as an effective means for dispensing and controlling the thickness of cast material onto a web or carrier layer. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the claimed apparatus in the process of Pearson et al in order to efficiently and accurately produce high quality products. In regard to embedding by the limitations of claims 9 and 11, such is taught by the combination of Pearson et al and Davis Sr. In regard to using the apparatus set up of claim 12 to form the last layer, such is well-known in the molding art in order to better control the quality and quantity of the added layer. Thus, it would have been obvious to one of ordinary skill in the art at the time the

invention was made to use the claimed apparatus in the process of Pearson et al in order to achieve the above benefit.

3. Claims 26-32 are allowed.
4. Applicant's arguments with respect to claims 1-17 and 26-32 have been considered but are moot in view of the new ground(s) of rejection.
5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. USPN 2446644 teaches embedding fibers into a resin layer by kneading. The following US patents teach the state of the art: 4203788; 5961900; 4778718; and 3214311 .
6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to EDMUND H. LEE whose telephone number is 571.272.1204. The examiner can normally be reached on MONDAY-THURSDAY FROM 9AM-4PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson can be reached on 571.272.1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

EDMUND H. LEE
Primary Examiner
Art Unit 1732

EHL

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/EDMUND H. LEE/

Primary Examiner, Art Unit 1791